

What Is Claimed Is:

1. A ceramic laminate having at least one solid electrolyte layer (11), having an electrical resistor track, especially running in a meandering shape, which is embedded in an insulation, and having two electrical lead tracks (24, 25) to the resistor track (20), wherein the resistor track (20) is made up of a material having a greater specific Ohmic resistance compared to the material of the lead tracks (24, 25) and has as great a track width as possible at a low track thickness.
2. The laminate as recited in Claim 1, wherein the specific Ohmic resistance of the material of the resistor track (20) is at least twice as great as the specific Ohmic resistance of the material of the lead tracks (24, 25).
3. The laminate as recited in Claim 1 or 2, wherein the temperature coefficient of the material of the resistor track (20) is less than that of the material of the lead tracks (24, 25).
4. The laminate as recited in one of Claims 1 through 3, wherein the width of the resistor track (20) is greater than the width of a lead track (24, 25).
5. The laminate as recited in Claim 4, wherein the width of the resistor track (20) is at least 50% greater than the width of a lead track (24, 25).
6. The laminate as recited in one of Claims 1 through 5, wherein the width of the resistor track (20) is dimensioned greater than 500 μm , preferably ca. 1000 μm .

7. The laminate as recited in one of Claims 1 through 6, wherein the track thickness of the resistor track (20) is less than 14 μm .
8. The laminate as recited in one of Claims 1 through 7, wherein the resistor track (20) is made of a high Ohmic platinum paste.
9. The laminate as recited in Claim 8, wherein the high Ohmic platinum paste has an aluminum oxide supporting frame of ca. 30%.
10. The laminate as recited in Claim 8 or 9, wherein the track thickness of the resistor track (20) amounts to at least 5 μm .
11. The laminate as recited in Claim 8, wherein the platinum paste contains nanoplatinum and the track thickness of the resistor track (20) is dimensioned at less than 5 μm .
12. The laminate as recited in one of Claims 1 through 11, wherein the resistor track (20) has three meandering windings having altogether four meander legs (201 - 204) that run parallel to one another; and the inner-lying meander legs (202, 203) that face each other are locally widened in their track width.
13. The laminate as recited in one of Claims 1 through 12, wherein the lead tracks (24, 25) are made of a low Ohmic platinum paste.
14. The laminate as recited in Claim 13, wherein the platinum paste has an aluminum oxide supporting frame of ca. 5%.

15. The laminate as recited in one of Claims 1 through 14, wherein the track thickness of resistor track (20) and lead tracks (24, 25) are dimensioned equally.
16. The laminate as recited in one of Claims 1 through 15, wherein the insulation is made up of a first insulating layer (21) applied onto the solid electrolyte layer (11), on which the resistor track (20) is situated, and a second insulating layer (22) that covers the resistor track (20).
17. The laminate as recited in Claim 16, wherein the first insulating layer (21) coats the solid electrolyte layer (11), the resistor track (20) and the lead tracks (24, 25) are printed onto the first insulating layer (21), and the second insulating layer (22) covers the resistor track (20) and the lead tracks (24, 25).
18. The laminate as recited in one of Claims 1 through 17, characterized by its use as an electrical heater (16) in a sensor element for measuring a physical property of a gas, preferably for measuring the oxygen concentration in the exhaust gas of internal combustion engines, in that the sensor element is attached, using a solid electrolyte layer (11) to the side, facing away from the solid electrolyte layer (11), of the resistor track (20) embedded in the insulation.
19. The laminate as recited in one of Claims 1 through 17, characterized by its use as a temperature sensor for measuring the temperature of a medium, especially of the exhaust gas of internal combustion engines.